

Remarks

Amendments to the Claims

The present amendment cancels claims 21, 23-25 and 32-40. With the entry of the amendment, claims 1, 2, 5 and 11-20 are pending in the application.

Claim 1 is amended by introducing a limitation: “wherein the individual is a human female.” This limitation is supported by the specification, see paragraph [0085], p. 24.

Claim 1 is further amended by introducing a limitation “FRZB gene represented by SEQ ID NO 1.” This limitation is supported by the specification, see paragraph [0061], p. 19.

No new matter is introduced by the amendments and entry of the amendments is respectfully requested.

Compliance with 37 C.F.R. 1.116

This response to a final office action is in compliance with the Rules because it includes a Request for Continued Examination (RCE) that includes the RCE fee and a proper submission and thus complies with 37 C.F.R. 1.114.

Claim rejections under 35 U.S.C. §112 (Written Description)

Claims 1, 2, 5, 11-21, 23-25 and 32-40 were rejected under this section. Claims 21, 23-25 and 32-40 are cancelled. The rejection of the remaining claims is obviated by the amendments.

The office action stated that there are at least eight FRZB genes among humans and other mammals. Therefore the rejected claims encompass a wide variety of sequences. This aspect of the rejection is obviated by the amendment to claim 1 introducing the limitation “FRZB gene represented by SEQ ID NO 1.”

The office action further stated that there is a number of polymorphisms in the FRZB gene in each species, including humans. This aspect of the rejection is obviated by the amendment introducing the limitation “wherein the individual is a human female.”

It is further noted that according to the definitions given in the specification, “detecting a polymorphism” or “detecting a SNP” means detecting *one specific* nucleotide in *one specific* sequence (see [0064], p. 20). Therefore the amended claims encompass detecting *only* the nucleotide 19524 in SEQ ID NO 1 of the woman’s genome.

The applicants respectfully assert that the §112 (written description) rejection to longer applies to amended claim 1. The remaining claims depend upon claim 1 and received no separate rejections. Withdrawal of the rejections as it applies to all claims is respectfully requested.

Claim rejections under 35 U.S.C. §112 (Enablement)

Claims 1, 2, 5, 11-21, 23-25 and 32-40 were rejected under this section. Claims 21, 23-25 and 32-40 are cancelled. The rejection of the remaining claims is obviated by the amendments.

The office action alleged that the claims encompass “analysis of human and non-human individuals” as well as “any frizzled related protein gene including secreted genes.” This aspect of the rejection is obviated by the amendments introducing limitations “wherein the individual is a human female,” and “FRZB gene represented by SEQ ID NO 1.”

The office action also stated that “data does not demonstrate a representative of (sic) polymorphisms that are predictably associated with osteoporosis and obesity”, (OA p. 11, 2nd paragraph).” In the interview, the examiner indicated that with respect to humans, supportive data exists only for females and only for obesity. This aspect of the rejection is obviated by the amendments as well as cancellation of the non-amended claims. With respect to amended claim 1, the data, (e.g. Table 4, p. 52, and discussion in par. [0066], p. 51) demonstrates association between the SNP A allele of G19524A and the increased BMI in women, suggesting that the presence of the SNP is indicative of statistically significant risk of obesity in women ($p < 0.05$).

The applicants respectfully assert that the §112 (enablement) rejection to longer applies to amended claim 1. The remaining claims depend upon claim 1 and received no separate rejections. Withdrawal of the rejections as it applies to all claims is respectfully requested.

Conclusion:


In view of the above, Applicants believe that all claims now pending in this Application are in condition for allowance.

The Commissioner is hereby authorized to charge a fee for the Request for Continued Examination as well as for the three-month extension of time to Deposit Account No. 50-0812. The examiner is further authorized to charge any fee deficiency, or credit any overpayment to the same account.

If the Examiner believes that a telephone conference would expedite prosecution of this application, please call the undersigned directly at 925-730-8567.

Respectfully submitted,

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